controller which is not shown. The computer graphics data D2 and the time spatial parameter TSP corresponding thereto that are stored in the storage server 3, and/or the computer graphics data D2 and the time spatial parameter TSP corresponding thereto that are recorded on the recording media MD are supplied to the image data processing unit 11 in the holographic stereogram producing device 10 as described above.

As an example of such processing in the image data processing unit 11 using the time spatial parameters TSP, the viewpoint conversion processing thereof will be described in detail.

In the holographic stereogram producing device 10, as described above, the captured image data D1 and/or the computer generated graphics data D2 are supplied to the image data processing unit 11, and a parallax image data string D3 is generated therein.

The parallax image data string D3 is generated, by the so-called straight track (translation motion) image capturing method. That is, for example, as shown in FIG. 5, an object P is positioned in a fixed state, and a camera 50 is moved along a straight track in parallel relative to the object P while shooting images thereof at a camera viewing angle of θc. By the way, this camera 50 is supposed to be the image capture device 1 or the virtual image capture device in the graphics data generating computer 2. In this case, the camera 50 is moved in a direction of arrow "b" as far as a distance sufficient for a range of its finder to traverse a width "le" of a holographic stereogram 51 from one end to the other end of the width "le", namely, the camera 50 moves

in a range of "lc", which equals a parallax image capture width, in an intermittent translation motion along arrow "b" at an equidistance Δlc while shooting images of the object P as many as 500 to 1000 shots. These captured images constitute the parallax image data string D3 having a horizontal parallax with respect to the object P.

Further, as another method of forming the parallax image data string D3, there is also known the so-called re-centering method. That is, for sequentially capturing images as shown in FIG. 6, while the camera 50 is moved in a direction of arrow "c" in parallel relative to the object P, an object lens PL of the camera undergoes a flap-operation at every position of image shooting so as to enable re-centering of a focused image of the object P in the center portion of the finder prior to shooting its image. In this re-centering method, it is not necessary for its camera image capture angle θc to coincide with the exposure angle of the element hologram image via the second cylindrical lens 28 in the optical system 15 of the holographic stereogram producing device 10 as described above. Thereby, even with a relatively small camera capture angle, image shooting of the object P can be executed efficiently. Further, this re-centering method has additional advantages that an image distortion resulting from the use of a wide-angle lens is avoided, and that an effective resolution of the captured image in the parallax direction can be improved.

By the way, in the holographic stereogram 51 to be reproduced with the white-light, there occurs such a phenomenon that a reproduced image of the holographic stereogram becomes gradually distorted as the viewing

point moves away farther from the hologram surface 51a. Still further, with regard to the holographic stereogram 51 to be reproduced with the white-light, it is noted that the closer the reproduced image is constantly located to the hologram surface 51a, the less the image is indistinct. These phenomena occur due to the fact that the positional relationship between the image captured point of the camera 50 and the object P of the parallax image data string D3, namely, an image shooting (capturing) distance "df", is maintained also with regard to the reproduced image of the holographic stereogram 51 which was produced by the holographic stereogram producing device 10, thereby resulting in the deviation due to a difference between the viewing point and the image capturing point.

Namely, in the holographic stereogram 51, if the parallax image data string D3 without being executed with the viewing point conversion processing (to be described later) is supplied as an element hologram image data D5 to the optical system 15 in the holographic stereogram producing device 10, and if an element hologram image on the basis of this element hologram image data D5 is exposed, recorded and produced on the hologram recording medium 4, its reproduced image 60 appears to be focused in a deviated position deeper than the hologram surface 51a by the length "df" corresponding to the capturing (shooting) distance as shown in FIG. 7A. Therefore, in order to be able to obtain a satisfactorily reproduced image 60 free from distortion and blurring in the holographic stereogram 51, the viewer must contact his/her eyes on the hologram surface 51a as shown in FIG.